

# **PHENIX WEEKLY PLANNING**

6/5/2008

Don Lynch

# Shutdown '08 Schedule

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## Shutdown Prep

Mu Trigger, RPC Prototype Installation,  
New Beampipe, CM Crane, Sta. 1 and MMN

Scaffolding Reviews

RPC Prototype C tests (in tent)

Install/field fit CM access stairs

Build MMN scaffolding

Build Sta. 1 N. scaffolding

MuTr Decapacitations (Sta. 1 N and MMN)

RPC Prototype D tests (in tent)

Design RPC installation fixtures &

MuTrigger FEE platforms

Prep work for Mutrgr platforms (water/elec)

Prep work for RPC proptotype install

move (7) MuID pipes

move gap 5 south cable tray

End of run Party



Done

All Done, Action Items in progress

in progress

in progress

in progress

in progress

ready to start 6/5

in progress

in progress

in progress

June

May 30

# Shutdown '08 Schedule, cont'd

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Prep RPC Proto, MuTrggr FEE N&S Racks Apr-July	
RPC engineering & safety review	~June 24
MuTrigger FEE N Install	July - Aug.
Install MuTrigger N cooling water & air	July - Aug.
RPC prototype gas system	July - Aug
Move shielding for RPC prototype installation	July - Sep
RPC prototype cable routing & support	July - Aug
Modify crystal palace & vapor barrier	July - Aug
Install MuTrigger FEE N platform&Rack	July 15 - Aug 1
RPC prototype install	Sep.-Oct. (RPC2 - PHENIX) (RPC3 - C. Pearson)
Install RPC prototype rack in tunnel south	Sep.
Install Mutrigger FEE's in MMS for RPC test	Sep.
Install MuTrigger FEE South platform	Sep.
Install MuTrgr S rack cooling & electric	Sep.
HBD Install	Sep.-Oct.
Connect electronics/gas/water/air for RPC	Sep. - Nov.
PC1 west work (needs planning)	Sep. - Nov.
CM Crane Install	Oct.
DC East?/West Repairs	Oct. - Nov.
Replace tunnel shielding	Nov. (C. Pearson)

# Shutdown '08 Schedule, cont'd

Remove all inst'n equipment(e.g. scaffolds)  
Gap 5 north piping and cable tray re-loc.  
Gap 2 north cable tray & crate re-mounts  
Fan Tray maintenance  
Prep for shutdown 2009  
Prep for run 9  
Close shield wall start shifts  
Start physics

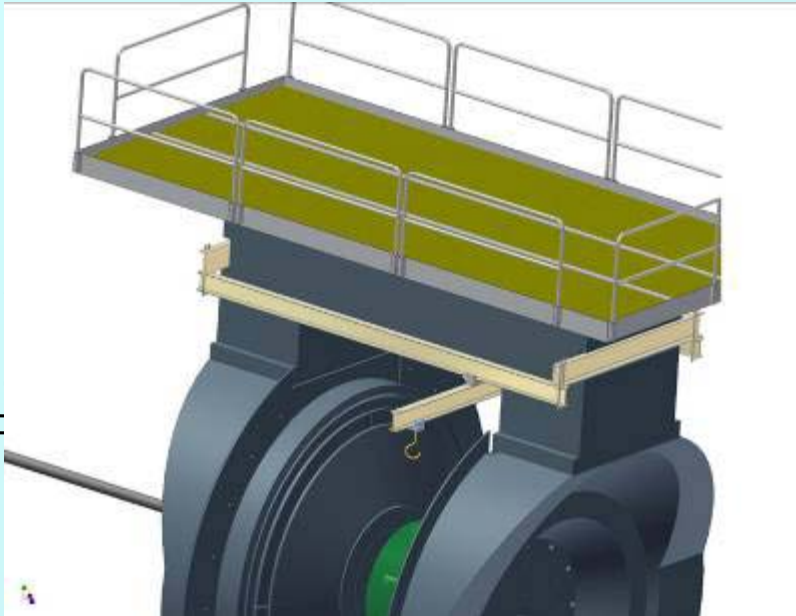
Oct. - Nov  
Oct. - Dec.  
Oct. - Dec  
Oct. - Dec.  
Nov. - Dec  
Dec  
Dec.  
Jan 1







## CM Crane, Station 1 scaffolding



**CM Crane procurement postponed  
Until FY09**



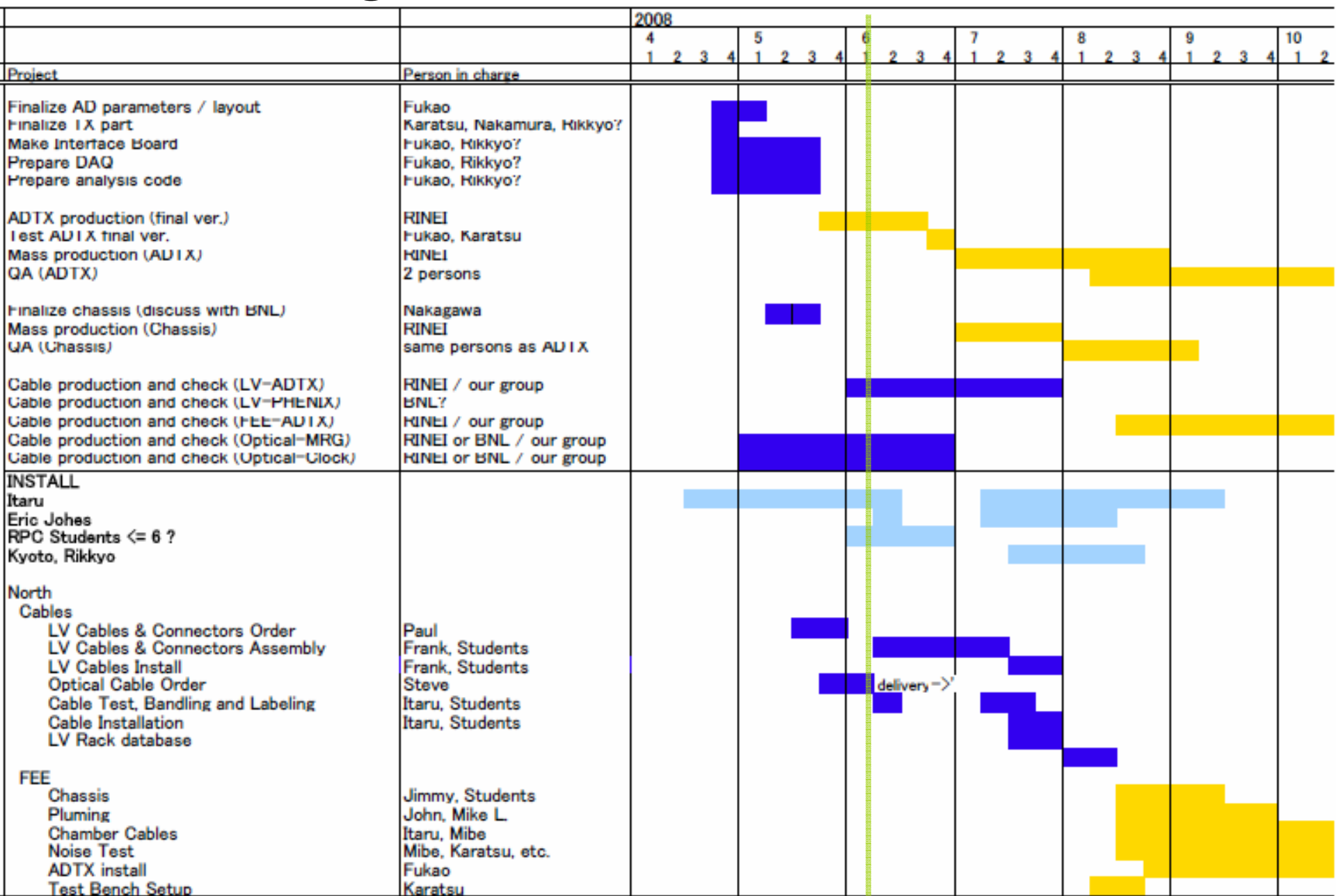
**Sta 1 scaffolding is here.  
To be built next week**

# Muon Trigger Updated Installation Schedule

RIKEN/RBRC

Itaru Nakagawa

# MuTrig Installation Schedule

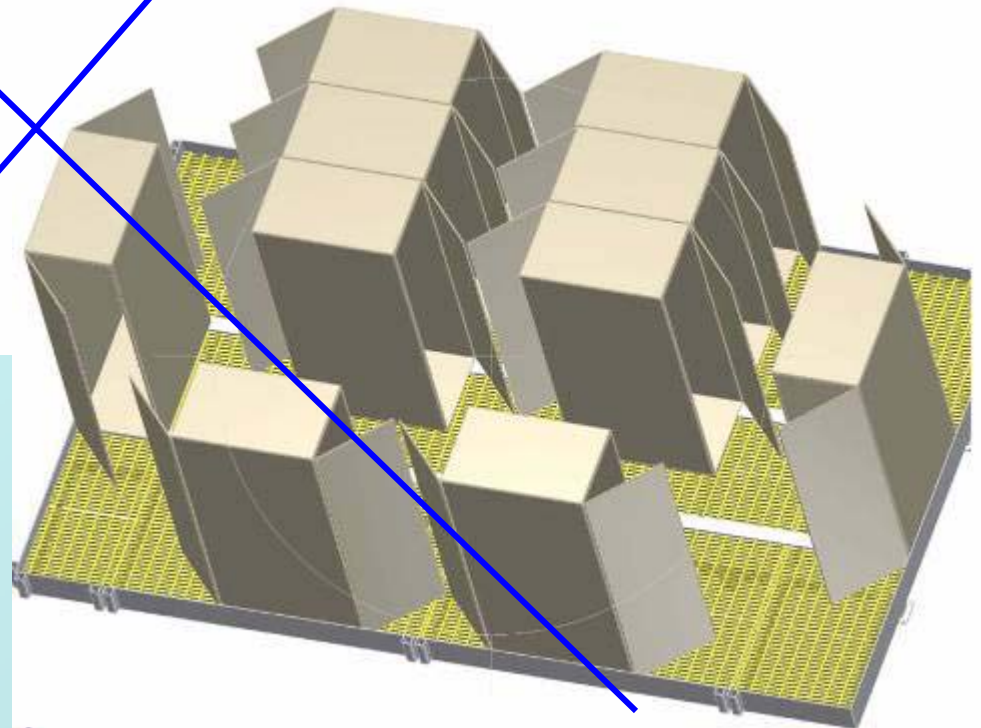
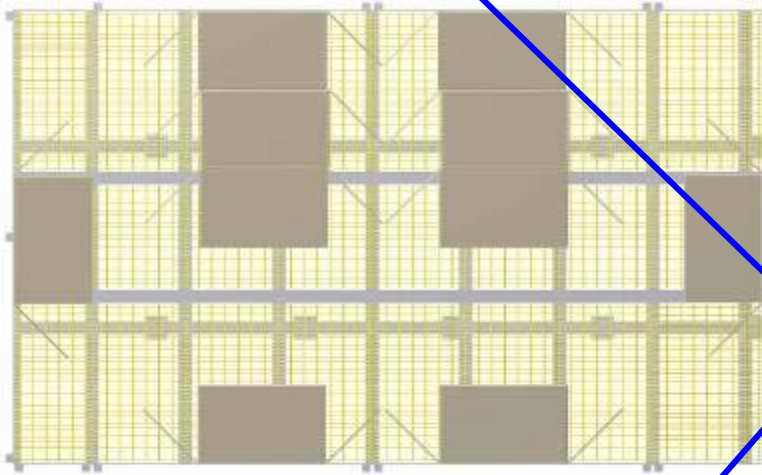




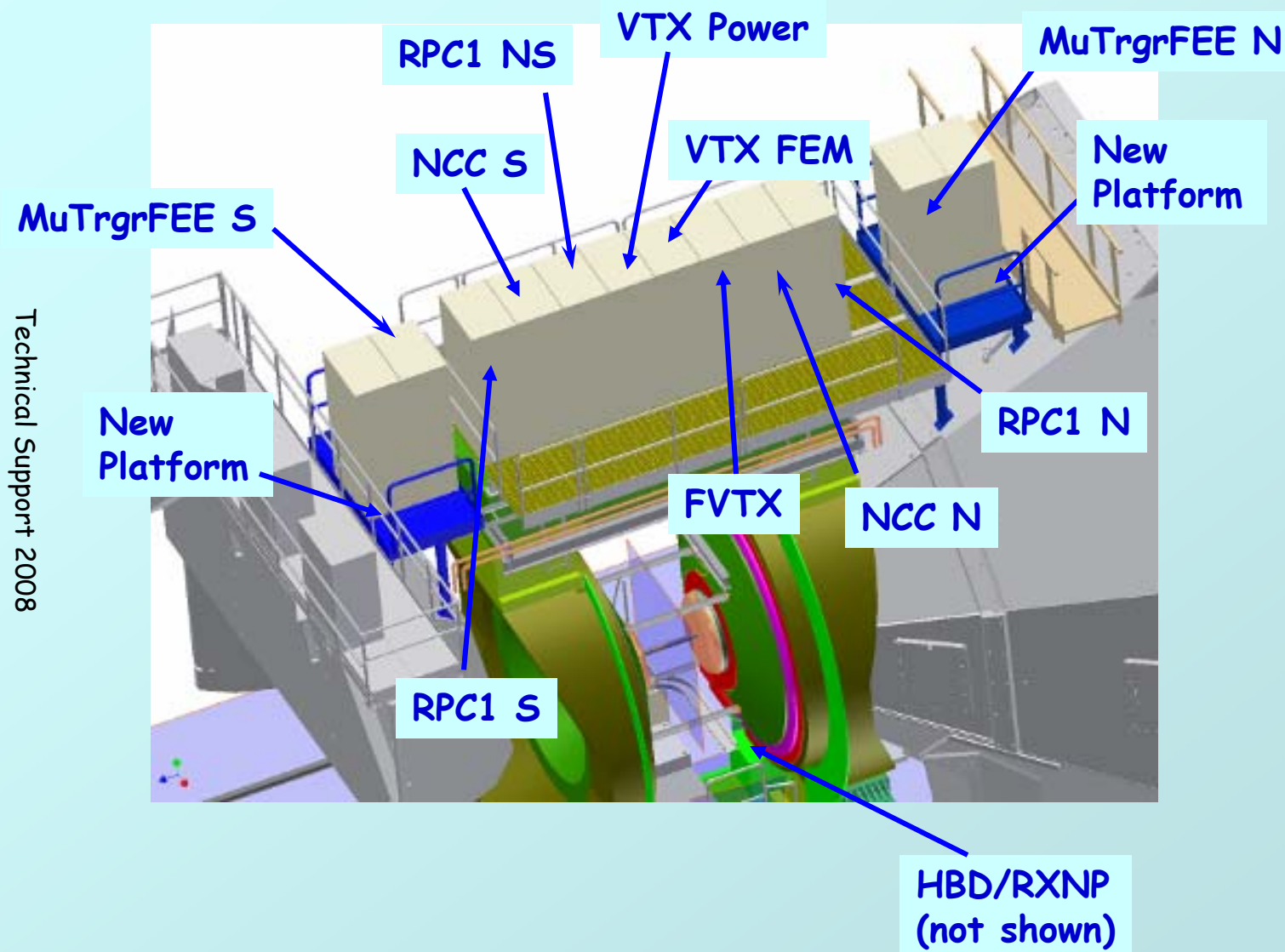
# Major Items

- LV/Optical Cable Bundle/Install  
→ Week 2 ~ 4, July
- Chassis Installation  
→ Week 2, August ~
- Chamber Cables Install & Noise Check  
→ Week 2, August ~
- ADTX Install  
→ Week 4, August ~

Exploring alternative  
configurations no  
obvious solutions

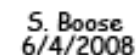


# Detector upgrade Rack allotments



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## Technical Support 2008



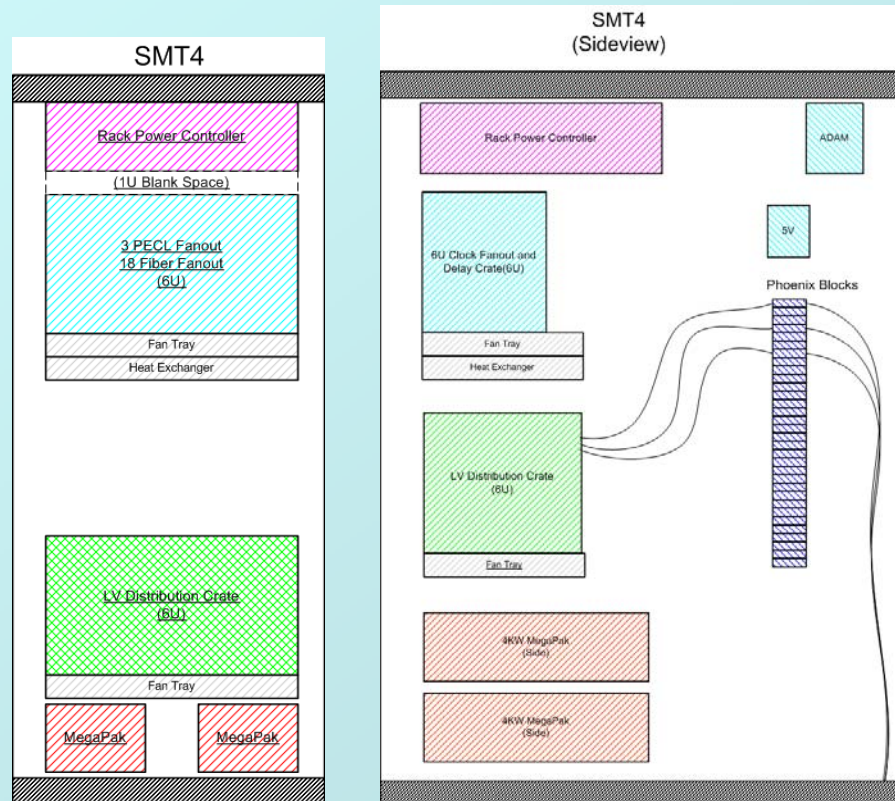
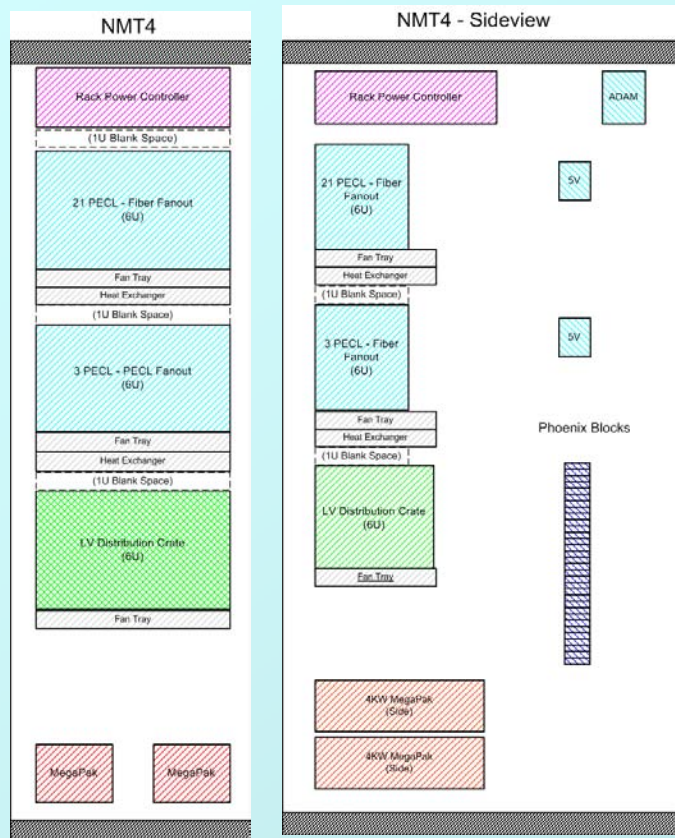


North

# MuTrigger Racks

South

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Mike L. & Frank have begun prepping these. Need info on RPC prototype rack.



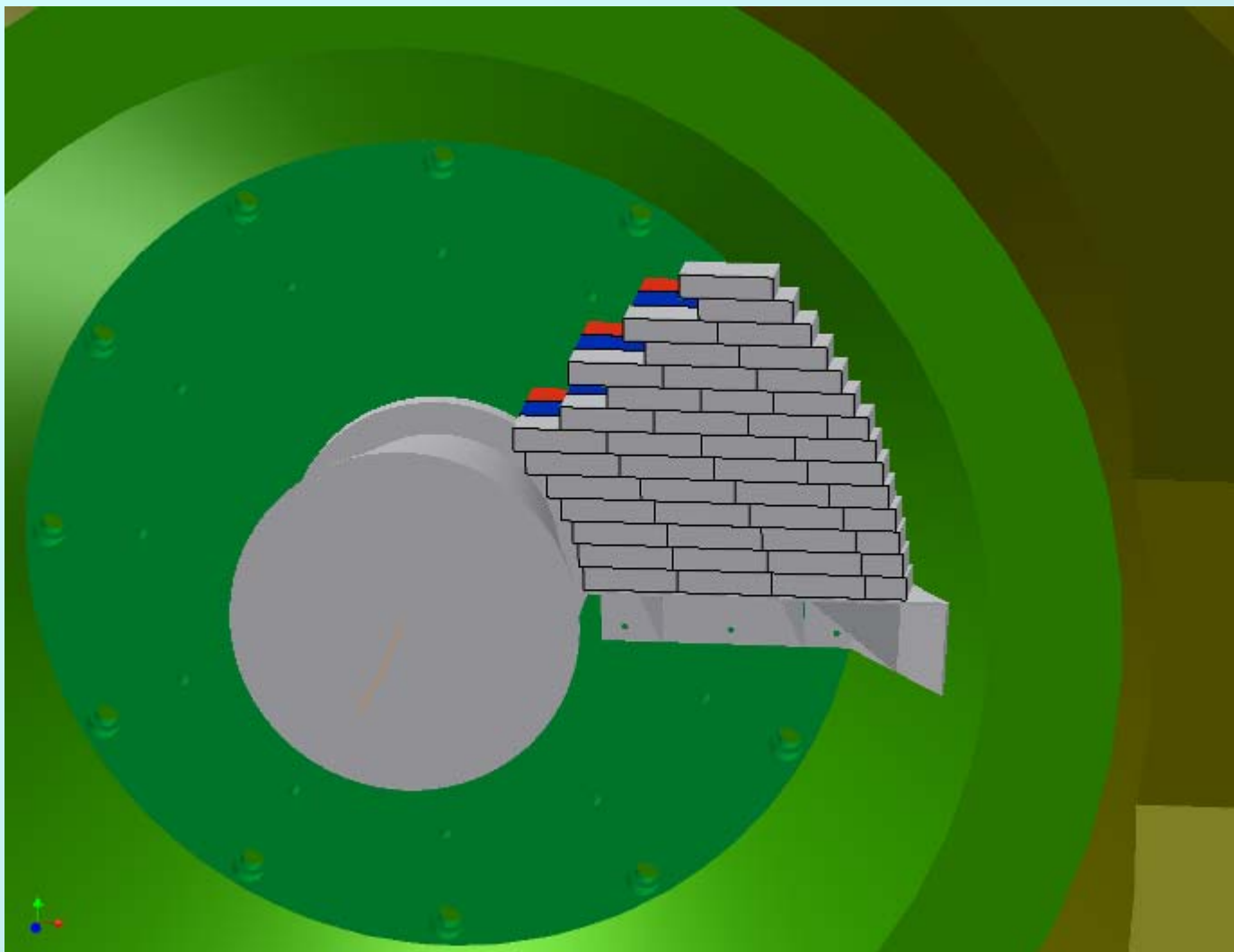
# MuTrigger FEE Rack Utilities

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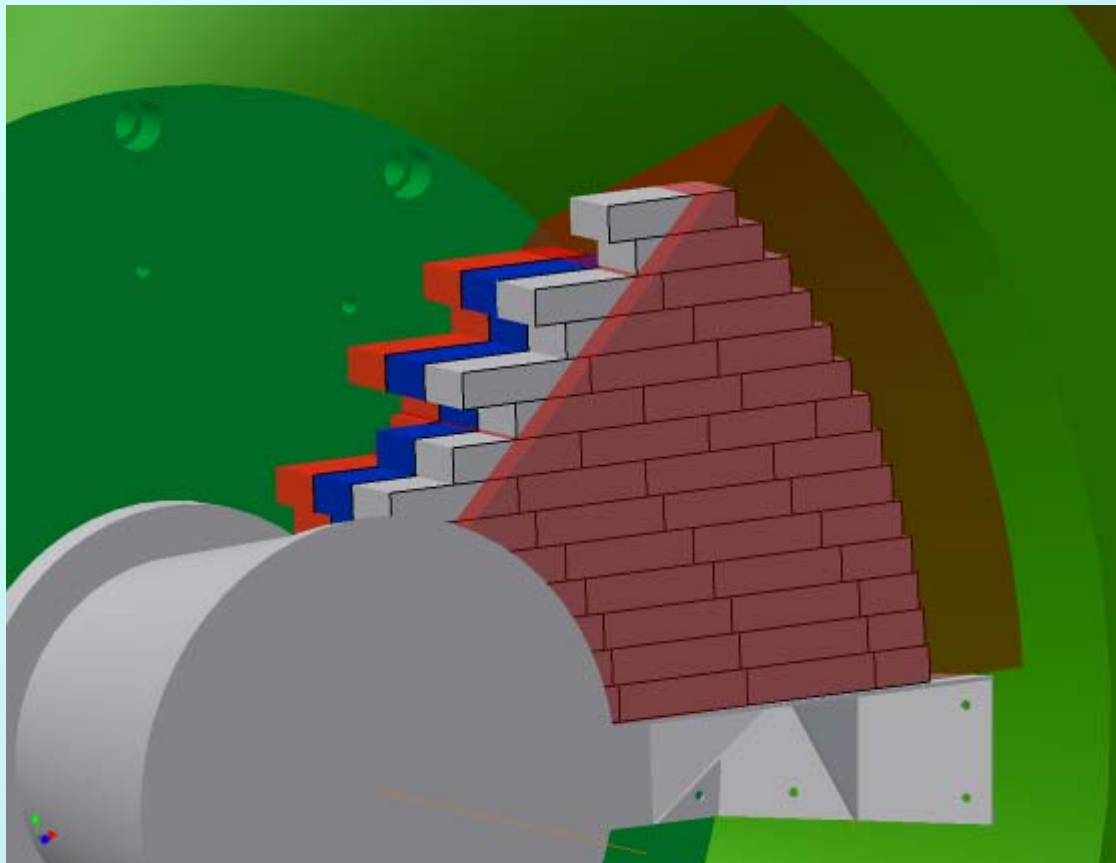
Need to install Tee's on supply and return lines: both s/b  $\frac{3}{4}$  to supply Mu Trigger North rack and future rack

# RPC Absorber Concept



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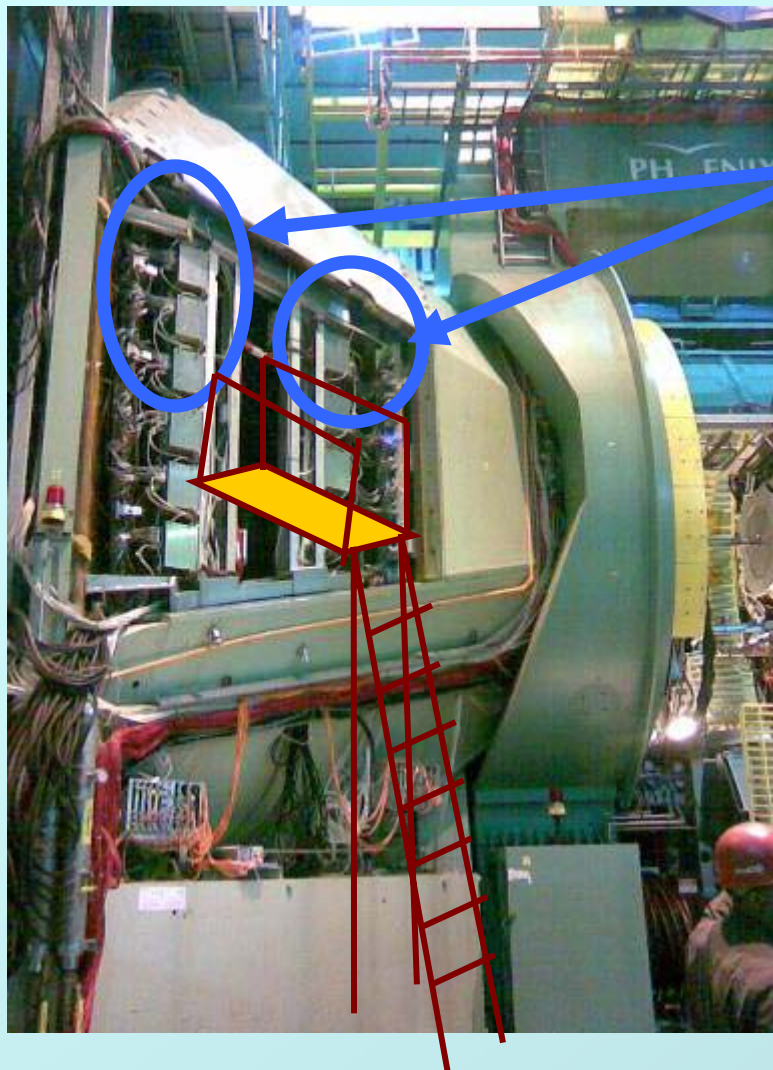
# RPC Absorber Concept



Uses 112 2x4x8  
PB bricks, 22  
need to be cut

12 inches deep  
(RPC group  
requested 35 mm  
(13.8 in))

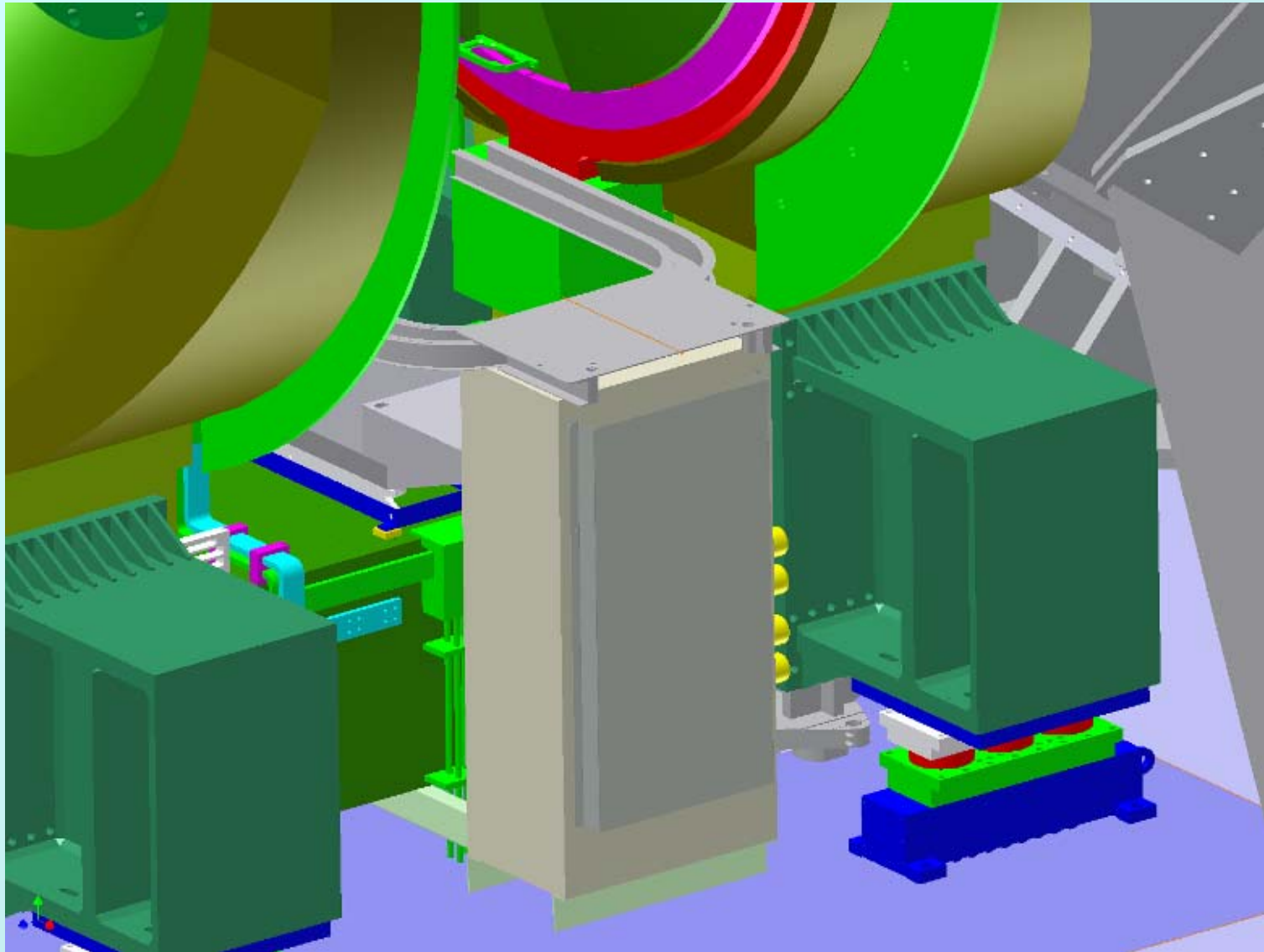
## MuTrigger FEE upgrades in MMS in support of RPC prototypes



To match absorber and prototype RPC's, we need to install new FEE upgrades in these 5 MuTR FEE's

We will develop a plan to access these for installation and testing from a custom work platform (to be designed).



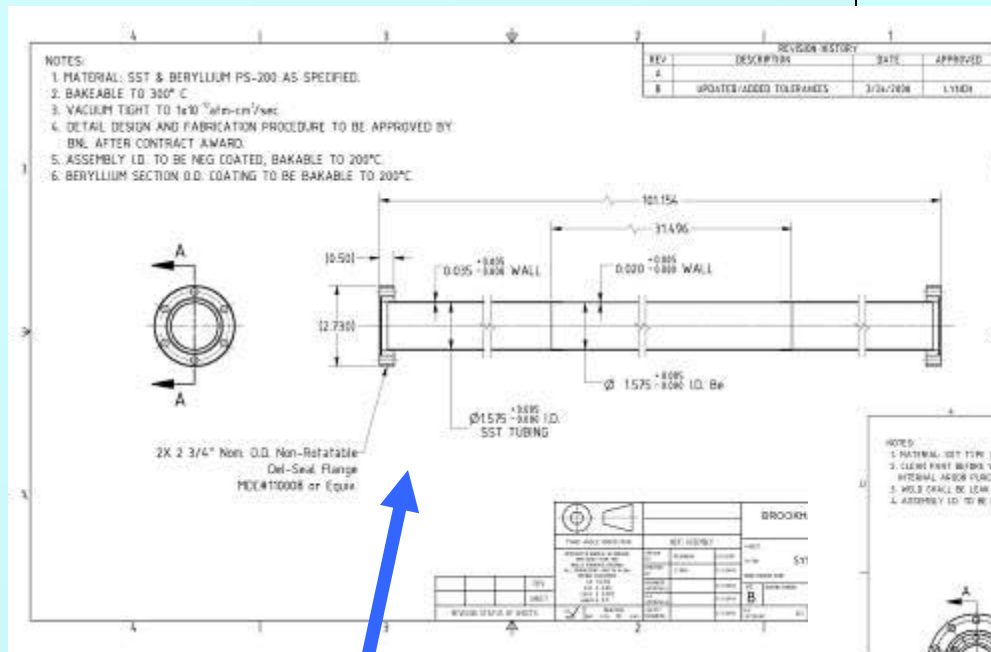




# New Beampipe Design & Review

Ready to place order  
when funding is  
available

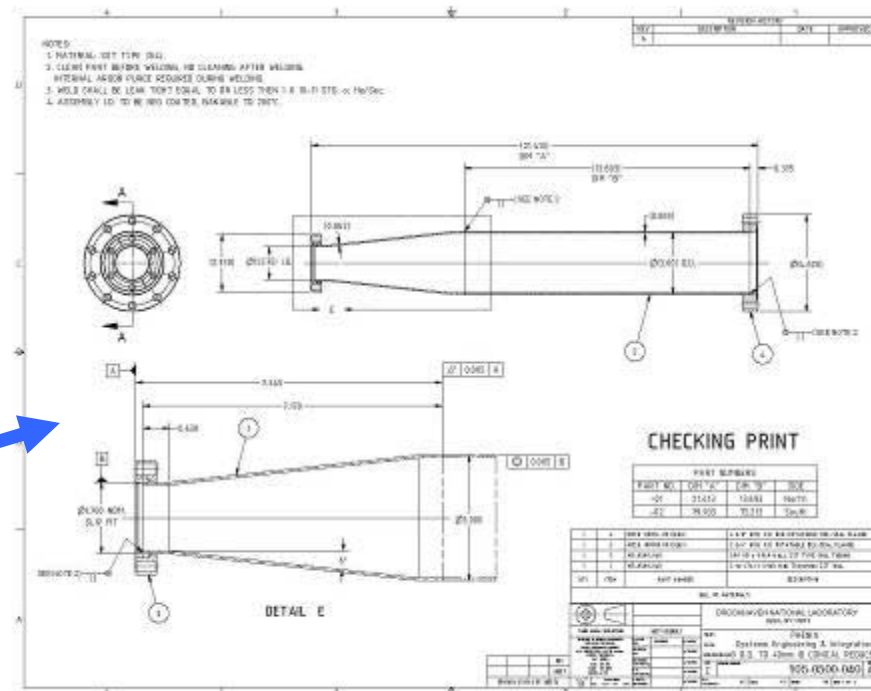
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SS/Be central beampipe

1-5/8" to 3" transitions

Drawings Done



## Safety & Engineering Review Action Item Status

1. New Beampipe
2. Mu Trigger FEE upgrade installation
3. RPC Prototype Installation
4. MuTr MMN & Station 1 scaffolding
5. CM Crane

# Shutdown '08 Electrician Work

- 1) Upgrade Crane switch: arc flash mitigation-remotely operated contactor which will feed the IR crane disconnect switch
- 2) Mixing house safety bucket rewiring
- 2) Install HVAC cooling and/or fan power circuits into RPC tent. Install fans/cooling units.
- 3) Run Power to new MuTrgr FEE racks on MMN and MMS
- 4) Install power and signal cable tray (ceiling suspended) for new DCM rack row - north of existing DCM racks.
- 5) Install power feeds to RPC north & south tunnel racks from IR power panels.

*NOTE: MuTr north power panel has no available breakers to feed north tunnel racks (south panel has spare breakers for use). More engineering analysis is required to determine if the north power panel should be increased in size or for installation of a sub panel branch can be accomplished.*

- 6) Assist in signal cable installation for MuTr/RPC upgrades as necessary.
- 7) Upgrade power capacity of Central Magnet power distribution for future bridge rack loads.
  - a) Remove existing 15KVA transformer and install 45KVA unit.
  - b) Install new (larger size) power cable from rack room to Central Magnet distribution breaker panels.
- 8) Install 120 volt AC power drops into new control room annunciator alarm rack (rack room).

# Work Permit Requirements

- CM Crane Installation
- RPC Prototype Installation
- HBD re-installation
- PC1 Repairs

These WP's not needed until Sept.

(More will be needed - to be added to the list as appropriate)

# Shutdown Work \$\$\$

## PHENIC Engineering and Technical Support Group



Spreadsheets updated, please review/correct/return to D. Lynch ASAP. Next Integration meeting tomorrow

### Projects Include:

1. CM Crane
2. New 40 mm ID beampipe
3. RPC Factory
4. RPC Prototype Installation
5. RPC Final Installation
6. MuTrigger FEE Upgrade
7. CM Access Stairs
8. MuTr Decapitations
9. Gas House Reorganization maintenance
10. Bridge Rework
11. HBD Re-installation
12. DC East & West Repairs
13. PC1 Repair
14. Rack room UPS upgrade
15. Bridge Power upgrade
16. Rack Room Update
17. Detector Rack Fan tray replacement
18. Safety System Upgrade
19. Cooling Water system upgrade
20. DAQ/Trigger Upgrade
21. DCM II Development
22. VTX support
23. FVTX support
24. NCC support

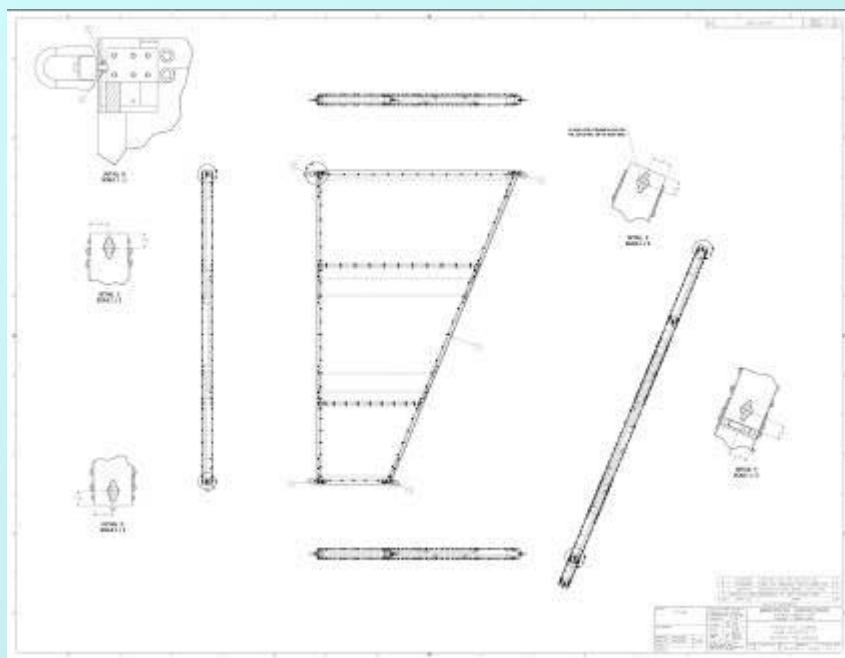


# RPC Prototype

Rec'd dim's and lifting points from Larry B.

Need to decide on prototype orientation and alignment for Sta 1 & 2 based on absorber location.

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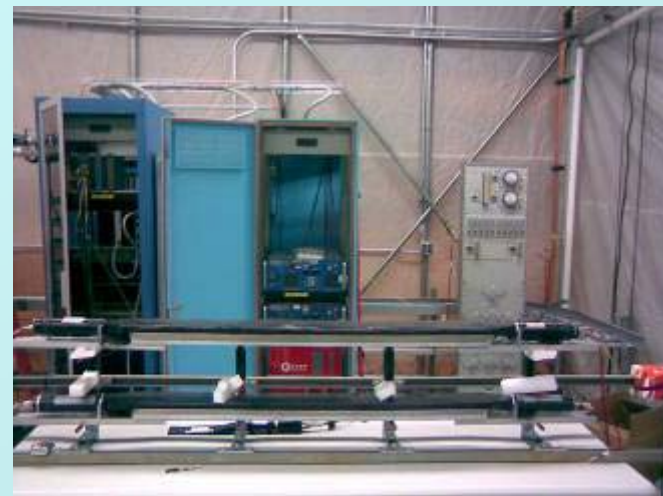
# RPC Factory Support, cont.

(2) ~3 Ton thru-the-wall AC's available from CA-D

208V Need isolated electrical source

Supplemental portable 1-1/4 ton unit ordered

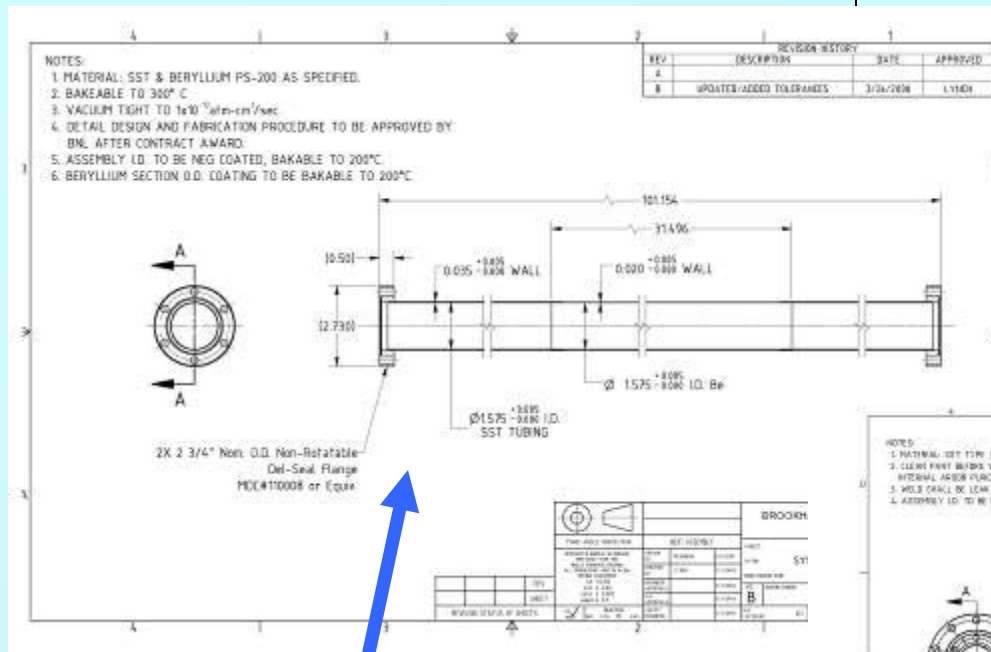
Storage Shelving: 2 additional sets rec'd. Assembly is done.



# New Beampipe Design & Review

BP designs at SAES for NEG quote. Meet w/ Brush Wellman 5/19

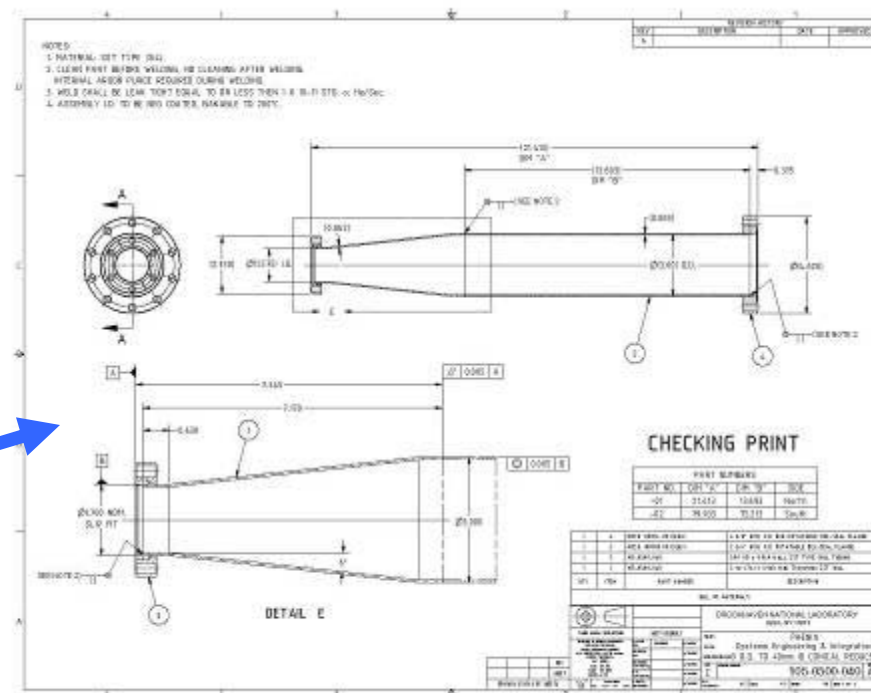
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SS/Be central beampipe

1-5/8" to 3" transitions

Drawings Done, C-A getting Quotes for NEG coating



## 3 die in Fla. after container gas leak, police say

'They lost their lives trying to help one another' co-worker says

Fort Lauderdale Fla.      A classic confined space accident

Ar (odorless/colorless/ non toxic but displaces oxygen) leak in container ship: One went to investigate was overcome, 2 more tried to help and were overcome.

**ISO 18001 & 14001 Registration Audit. : week of June 16**

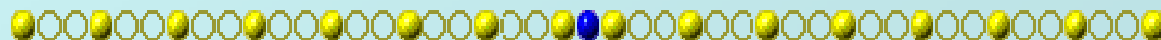
ISO14001: Environmental Management: compliance, pollution prevention, waste minimization, assurance

ISO18001: OHS/ISM Management: planning for hazard identification, risk assessment and risk control

# Where To Find PHENIX Engineering Info

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Links for the weekly planning meeting slides, long term planning, pictures, videos and other technical info can be found on the web site:



[http://www.phenix.bnl.gov/WWW/INTEGRATION/ME&Integration/DRL\\_SSint-page.htm](http://www.phenix.bnl.gov/WWW/INTEGRATION/ME&Integration/DRL_SSint-page.htm)